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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,277	01/25/2002	Monty A. Forchand	PI598US01	3445

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EXAMINER

WONG, KIN C

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/057,277	FOREHAND, MONTY A.	
	Examiner	Art Unit	
	K. Wong	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 9-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

This is response to Pre-Appeal Brief Review filed on 7/5/06.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasamoto (4510541).

Sasamoto discloses a procedure for raising a fly height of a transducer (i.e., float away from a disk surface) in a disk drive for moving the transducer at a maximum fly height setting at a radial position (in figure 6, and, col. 2, lines 8 –12 and col. 1, lines 39-43 where Sasamoto describes the raising the transducer to the maximum setting at a radial while substantially at the maximum fly height to a beginning position (or the outer periphery position – col. 3, lines 56-61 of Sasamoto) and lowering the transducer to a minimum fly height at the beginning position (see figure 3 and col. 2, lines 28-42 of Sasamoto) and executing a move cycle routine moving the transducer radially away from the beginning while remaining substantially at the minimum fly height (col. 4, lines 15-24 where Sasamoto describes the fly height at the minimum fly height as the transducer moves radially away from the beginning position).

Although, Sasamoto recited the maximum and the minimum in a positive value quantity, it would have been obvious to the artisan in the art to acknowledge the values as the maximum and the minimum of the fly height of the transducer since the instant

recitations are in the broadest descriptions of the instant invention. Furthermore, the recited scoop-plow moving action is transparent in Sasamoto, and, the instant recitations merely reciting the actions in a variation of wordings that which are notoriously well known to the artisan in the art, especially when there are no unexpected result seem to occur. The rationale for Sasamoto is to positively quantity of the max and min values in a design.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Sasamoto (4510541).

Regarding claim 9: Sasamoto discloses a data storage device (as (depicted in figure 1 of Sasamoto) including:

a transducer (element 7 in figure 1 and see associated descriptions for details) and a storage medium (element 3 in figure 1) positionable along two dimensions (vertical and horizontal) with respect to each other in a data transfer relationship (col. 3, lines 19-33 and col. 3, lines 53-66 of Sasamoto); and

a control element (element 22 in figure 5 and col. 3, lines 42-52 of Sasamoto) executing a move cycle routine by steps for associating a spatial separation between

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the transducer and the storage medium in relation to a direction of moving the transducer across the storage medium.

Claims (9-27) rejected under 35 U.S.C. 102(b) as being anticipated by McNeil (4384311).

Regarding claims 9-12 and 18-20: McNeil discloses a data storage device with a transducer and a storage medium along two dimensions with respect to each other in a data transfer relationship and control element that control the execution of the move cycle routine that across the storage medium (see figure 1; and; col. 2, lines 14-34; col. 3, lines 53-66; col. 4, lines 44-56 and the abstract of McNeil).

Regarding claim 13: McNeil depicts in figure 1 that wherein the transducer dwelling at each of plurality data storage track during the move cycle (see associated descriptions for details).

Regarding claims 14-15: McNeil teaches that wherein the transducer dwelling at a selected data track for less than one complete revolution of the data storage track during the move cycle (in col. 5, lines 3-7).

Regarding claims 16 and 25-26: McNeil teaches that wherein oscillating the transducer while the fly height is greater than the nominal fly height subsequent to completing the move cycle (in col. 5, lines 3-6 of McNeil).

Regarding claim 17: McNeil describes that the moving transducer to a nominal fly height (or to normal operation mode) subsequent to completing the move cycle (in col. 5, lines 22-25 of McNeil).

Regarding claim 21: the limitation of second separation is thirty percent greater than minimum operable data transfer separation (or below the normal flying height) are considered inherent because McNeil describes the percentage that is greater than minimum operable data transfer separation (in col. 5, lines 1-9 of McNeil).

Regarding claims 23-24 and 27: McNeil describes the various transducer fly height between the inner diameter and the outer diameter (in col. 5, lines 10-20 of McNeil).

Response to Arguments

Applicant's arguments filed 7/5/06 have been fully considered but they are not fully persuasive.

Regarding to remarks (filed on 7/5/06) on page 2: applicant argued that Sasamoto fails to disclose the moving step doesn't begin until the completion of the raising step. Such recitation of the moving step after the completion of the raising step never recited or positively pointed out in the claims as applicant and applicant's representative has argued.

In additionally, applicant and applicant's representative have admitted the constant broadening the claim scope during the prosecution which distracting in the prosecution (in page 2 of the remarks filed on 7/5/06). The broadening is also distracting the distinctness and the clarity of the instant invention which applicant and applicant's representative asserted as the basis to the Examiner's mischaracterization and misconstruction of the reference to the claims.

Regarding claim 9 of the remarks (filed on 7/5/06): applicant and applicant's representative argued that McNeil fails to disclose the "associating a spatial separation between the transducer and the storage medium in relation to a direction of moving the transducer across the storage medium." Moreover, applicant and applicant's representative further argue that spatial separation (fly height or head/disk spacing) increases in a single pass/path (single swept) or one directional of the travel of the head in respective to the disk surface (i.e., the spacing of the head/disk increases from the inner diameter to the outer diameter (radial position) of the disk in one sweeping path)). Such distinction is not positively recited in the recitations of the claims.

Regarding claim 18 of the remarks (filed on 7/5/06): applicant and applicant's representative argued that McNeil fails to disclose the "... spatially separate a transducer from a storage medium by a first separation...move the transducer...at the first separation...lower the transducer to a second separation...move transducer across the storage medium at the second separation." Moreover, Applicant and applicant's representative further argued that the first separation is upwardly direction (raising vertically or higher than the nominal fly height or above the nominal data transfer separation baseline) and the second separation is downwardly direction (vertically downward or lower than the nominal fly height or below the nominal data transfer separation baseline) in a single path. Such distinctions are not positively recited in the claims.

Hence forth, the applicant and applicant's representative assertion of the Examiner's mischaracterization the references and mis-reconstruction of the claims are

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unwarranted because the applicant and applicant's representative have admitted that a constant broadening the claim scope during prosecution is distracting the analysis of the instant invention (as stated on page 2 of the remarks (7/5/06)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Wong whose telephone number is (571) 272-7566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, H. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kw

9 Apr 07


K. WONG
PRIMARY EXAMINER